



Material Testing Charges

(5th REVISION)

2016

PROCESS LABORATORIES

(ISO-17025 Accredited)



Process Laboratories were initially established in early eighties to meet the analytical requirement of production and service units of steel plants. Later on its specialized material testing facilities were extended for the customers of outside agencies and provide solution to their testing needs with quality, reliability & accuracy.

Process Labs of Pakistan steel are ISO-9001-2008 certified and pioneer in ISO-17025 accredited steel industry labs. Process Laboratories of Pakistan steel is a network of the following laboratories.

- Express Spectral Laboratory.
- Spectral Laboratory
- XRF Laboratory
- Chemical Laboratory
- Coal / Coke Testing Laboratory
- Refractory Testing Laboratory
- Mechanical Testing Laboratory
- Non-Destructive Testing Laboratory
- Water Testing Laboratory
- Oil & Gas Testing Laboratory
- Macro Structure Laboratory

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Sr.No.	Description	Main test	Testing Charges
2	Instrumental and wet Analysis		
2.1	Ferrous Metals.		
A	Cast iron/ carbon steel/ low & high alloy steel/ special steel	C, Si, Mn, P, S, Ni, Cr, Ti, V, Al, Cu etc Annexure –A Annexure –B	<p>i) Rs 6000/- per sample up to 05 elements</p> <p>ii) Rs. 1200/ per extra element.</p> <p>Required Sample size/ Qty:</p> <p>i) For instrumental testing 70mmx70mmx20mm</p> <p>ii) For wire sample Dia mim 2mm Length 100mm</p> <p>iii) 50 gm chips</p>
B	Coating of Galvanized Product	Mass of coating	<ul style="list-style-type: none"> Rs 1500= / per sample <p>Required Sample size:</p> <ul style="list-style-type: none"> 100mm x 100mm
2.2	Special Instrumental Testing.		
	Steel/ cast iron/ ores/minerals/ oxides/ ferro alloys	C & S Or O ₂ & N ₂	<ul style="list-style-type: none"> Rs 1500= / per sample Required Sample size: 50 gm chips/ powder
2.3	Non- Ferrous Metals		
A	Cu & Cu alloys	Cu , Pb, Sn, Zn, Fe, Sb, Al, Ni, Mn, Si etc	<p>i). Rs. 6000/ per sample up to 05 elements.</p> <p>ii). Rs.1200/ per extra element.</p> <p>Required Sample size/ Qty:</p> <p>i) For Instrumental testing 70X70X20 mm.</p> <p>ii) For wet testing 50 gms chips.</p>
B	Al & Al alloys	Al, Si, Fe, Cu, Mn, Zn, Ti etc	
C	Lead Tin and their alloys.	Pb, Sn, Sb, Fe, Al, Zn, Cu, Si, etc	
D	Zinc and zinc alloys	Zn, Fe, Pb, Al, Cd, Cu, Sn, Sb, Si, etc	
E	Silver & silver alloys	Ag, Sn, Cu, Zn, Cd, etc	

2.4	Materials Testing		
A	Raw & Refractory Materials		i) Rs. 6000/ per sample upto 05 elements. ii) Rs.1200/ per extra element. Required Sample Qty: <ul style="list-style-type: none"> 50 gms powder (100 mesh) Sample preparation charges: <ul style="list-style-type: none"> Rs.3500/- in case of Lump form & Rs.2000 in case of granule form will be charged additionally.
	Iron Ore, Quartz, Mn Ore, Cement, Limestone, Chrome Magnesite Dolomite, Magnesite, Clays, Silica Sand,	Fe(T), TiO ₂ , FeO MnO Fe ₂ O ₃ , Mn(T) SiO ₂ , P, S, Al ₂ O ₃ , CaO, MgO, Cr ₂ O ₃ LOI, Alkalies	
B	Ferro Alloys		
	<ul style="list-style-type: none"> Ferro silicon, Ferro Manganese, Ferro chrome. Ferro tungsten, Ferro molybdenum. Ferro titanium and Ferro Vanadium 	C, Si, Mn, P, S, Cr W, Mo, Ti, V, Al, etc	
C	Fluorite	<ul style="list-style-type: none"> Moisture, CaCO₃, CaF₂, SiO₂ 	
		<ul style="list-style-type: none"> Moisture, Ash, Volatile Matter, Fixed Carbon 	<ul style="list-style-type: none"> Rs. 12500/ per sample
D	Coal / Coke (Proximate/ Ultimate Analysis) Required Sample Qty: 500gms	Ash in Coal	<ul style="list-style-type: none"> Rs. 5000/ per sample
		Sulphur (Total)	<ul style="list-style-type: none"> Rs. 3000/ per sample
		Free Swelling Index (F.S.I)	<ul style="list-style-type: none"> Rs.2000/ per sample,
		Ash composition. (SiO ₂ , Al ₂ O ₃ , CaO, MgO, Fe ₂ O ₃ , TiO ₂)	<ul style="list-style-type: none"> Rs. 8500/ per sample in case of coal sample. Rs. 5000 will be additionally charged for ash preparation.
E	Sodium silicate (water glass)	<ul style="list-style-type: none"> Moisture , Density, SiO₂ , Na₂O, K₂O, 	<ul style="list-style-type: none"> Rs1500 / per test Required Sample Qty: 500 ml liquid,

F	Molasses	<ul style="list-style-type: none"> • Bulk density, • ash, • reducing mater as invert sugar, • Moisture. 	<ul style="list-style-type: none"> • Rs1500 / per test Required Sample Qty: 500 ml liquid,
G	Amorphous graphite	<ul style="list-style-type: none"> • C, Ash, Density. 	
H	Commercial / Industrial Chemicals		
	Hydrochloric acid, Phosphoric acid, Sulphuric acid.	<ul style="list-style-type: none"> • Purity, SO₄ , Density • PO₄,Fe, Cl⁻ 	<ul style="list-style-type: none"> • Rs.1500/ per test Required Sample Qty: 500 ml liquid, 50 grams
	Caustic Soda, Ammonia	Purity, Density, Fe, CO ₃ , SO ₄ , Cl	
	Tri Sodium Phosphate	Purity, Density, CO ₃ , SO ₄ ,Cl, P ₂ O ₅ , Na ₂ O	
	Carbon Tetra Chloride	Purity, Density, Chloride, Boiling point range	
I	Packing Material		
	Asbestos sheet Gland packing (Graphite, non-graphite)	Density, Temperature, stability, acid/ alkalis, resistant, oil contents, graphite contents, LOI.	<ul style="list-style-type: none"> • Rs. 1500/ test Required Sample Qty: 150 grams
J	Lubricating oil	Viscosity, Specific Gravity, Flash Point (Open/ Closed Cup), Water Contents, Acidity, (Neutralization No), Penetration Of Grease, & Receptivity Of Rubber Sheet. Mechanical Impurities (Suspended Solids)	<ul style="list-style-type: none"> • Rs. 1200/ test Required Sample Qty: 1000 ml
		Viscosity index (viscosity at 40% °C/ 100)	<ul style="list-style-type: none"> • Rs. 3500/ test Required Sample Qty: 1000 ml
K	Water	<ul style="list-style-type: none"> • Mechanical impurities, • total dry salts, • Proofness of Tarpaulin • Oil Contents • Acidity • Alkalinity • Hardness • Calcium • Magnesium • Iron • Chloride • Sulphate • CO₂ • pH • Ammonia • Phosphate 	<ul style="list-style-type: none"> • Rs. 1200/ test Required Sample Qty: 1500 ml.
3	Physical testing of Refractory & Alloyed materials.		
A	Refractory materials	Refractoriness,	<ul style="list-style-type: none"> • Rs. 12500/ test Required sample Qty: 200 gm (100 mesh) Sample preparation charges: <ul style="list-style-type: none"> • Rs.3500/- in case of Lump& • Rs.2000 in case of granule form will be charged additionally

		Refractoriness under load	<ul style="list-style-type: none"> Rs. 12500/ test Required Sample size: 300X120X80 mm Sample preparation charges <ul style="list-style-type: none"> Rs.3500/ sample
		<ul style="list-style-type: none"> Specific gravity, Density, Porosity. 	Rs. 1200/ test. Required Sample Volume : 50 cm³(min) Sample preparation charges: Rs.500/ sample
		<ul style="list-style-type: none"> Water absorption 	<ul style="list-style-type: none"> Rs. 1200/ test
		<ul style="list-style-type: none"> Cold crushing strength 	<ul style="list-style-type: none"> Rs. 1200/ test <ul style="list-style-type: none"> Required Sample size : 300X120X80 mm Sample preparation charges <ul style="list-style-type: none"> Rs.3500/ sample
		<ul style="list-style-type: none"> Moisture content, 	<ul style="list-style-type: none"> Rs. 1200/ test
		<ul style="list-style-type: none"> plasticity index, 	<ul style="list-style-type: none"> Rs. 1200/ test Required sample Qty: 300 gm (100 mesh) Sample preparation charges: <ul style="list-style-type: none"> Rs.3500/- in case of Lump form will be charged additionally
		Sieve analysis (Range- Annex-G)	<ul style="list-style-type: none"> Rs. 2500/ sample upto 04 sieve Rs. 400 per extra sieve Required Sample Qty: 500 grams.
B	Cement & Concrete	<ul style="list-style-type: none"> Bending strength, Compressive strength, Setting time, Soundness Test, Consistency Test. 	<ul style="list-style-type: none"> Rs. 1500/ test <ul style="list-style-type: none"> Required Sample Qty : 05 kg
		Fineness test	<ul style="list-style-type: none"> Rs. 2500/ test Required Sample Qty : 500 gm
C	Aggregate Concretes.	<ul style="list-style-type: none"> Cube compressive strength, cube solid block, cube hollow block, compressive strength, absorption test Moisture contents. 	<ul style="list-style-type: none"> Rs. 1500/ test Required Sample size: 150X150X150 mm

4	Mechanical testing of steel products.	Ultimate Tensile Strength, Elongation, Reduction in area, yield / proof stress at 0.2 %, 0.5 %, 1.0 %	<ul style="list-style-type: none"> Rs.2600/ sample for UTS including sample preparation. Rs. 800/ test will be additional charged on associate tests.
		Computer Graph Cupping Test Bend Test Hardness Test	<ul style="list-style-type: none"> Rs.2400/ test
		Young Modulus Rank ford (r) value	<ul style="list-style-type: none"> Rs.3500/- test
		Impact Test (at room temp)	<ul style="list-style-type: none"> Rs.2400/ test
5	Macro structure study	Macro Examination Sulphur Print	<ul style="list-style-type: none"> Rs. 3000/ test Required Sample size:75X75 mm
6	Non-Destructive testing		
A	Non-Destructive testing Within Pakistan steel	Dye penetration test (DPT)	<ul style="list-style-type: none"> Rs.6000/ m²
		Radiography	<ul style="list-style-type: none"> Rs. 4000/ per exposure/ film (10"x4") Rs.5000/ exposure/ film 15"x4"
		Ultrasonic test, Magna flux, Eddy current, crack depth.	<ul style="list-style-type: none"> Rs.4000/ running meter per test,
		Thickness measurement (01mm to 90mm)	<ul style="list-style-type: none"> Rs.800/ per point,
B	Additional charges for outside Pakistan steel (within Karachi)	NDT Inspector	<ul style="list-style-type: none"> 7500/- per Inspector per day.
		x-ray machine	<ul style="list-style-type: none"> Rs.22500/ per day
		Ultrasonic machine	<ul style="list-style-type: none"> Rs.10000/ per day
		Isotope Ir.192	<ul style="list-style-type: none"> Rs.7500/ per day.
		Transport	<ul style="list-style-type: none"> Rs.7500/ per day.

ANALYTICAL RANGES FOR CAST IRON.**Annexure-A**

ELEMENTS	ANALYTICAL RANGES (%AGE)
CARBON (C)	1.40~4.30
SULPHUR (S)	0.001~0.230
PHOSPHOROUS (P)	0.001~2.40
SILICON (Si)	0.002~1.20 1.0~3.50
MANGANESE (Mn)	0.001~1.20 1.000~4.10
CHROMIUM (Cr)	0.0015~1.20 1.000~9.10
NICKEL (Ni)	0.0025~2.00 1.80~7.20
MAGNESIUM (Mg)	0.001~0.12
MOLYBDENUM (Mo)	0.002~2.20
ALUMINUM (Al)	0.001~0.10
COPPER (Cu)	0.001~0.25 0.20~2.50
TITANIUM (Ti)	0.001~0.450
NIOBIUM (Nb)	0.0025~0.30
VANADIUM (V)	0.001~0.620
LEAD(Pb)	0.003~0.060
TIN (Sn)	0.001~0.240

ANALYTICAL RANGES FOR STEEL**Annexure-B**

Elements	Low Alloy Steel	Cr-Cr/Ni- Steel	Mn-Steel
CARBON (C)	0.002~1.40	0.002~2.50	0.002~1.60
SULPHUR (S)	0.001~0.10	0.001~0.35	0.001~0.063
PHOSPHOROUS (P)	0.001~0.120	0.001~0.080	0.001~0.10
SILICON (Si)	0.002~1.60 1.40~5.50	0.002~2.00 1.80~4.20	0.002~1.60
MANGANESE (Mn)	0.001~2.30	0.001~1.80 1.60~15.20	0.10~19.60
CHROMIUM (Cr)	0.0015~8.30	0.0015~2.00 1.80~32.10	0.0015~4.00
NICKEL (Ni)	0.0025~1.60 1.40~5.50	0.0025~4.50 4.0~43.40	0.0025~3.80
MOLYBDENUM (Mo)	0.002~2.40	0.002~0.55 0.5~6.10	0.002~2.10
ALUMINUM (Al)	0.001~2.00	0.001~0.27 0.22~2.10	0.001~0.40
COPPER (Cu)	0.001~0.25 0.20~1.20	0.001~0.35 0.30~6.20	0.001~0.53
COBALT (Co)	---	---	0.001~0.36
TITANIUM (Ti)	0.001~0.82	0.001~3.20	---
NIوبيUM (Nb)	0.003~0.32	0.004~3.00	0.003~0.05
VANADIUM (V)	0.001~0.82	0.001~0.30 0.25~10.00	0.001~0.340
LEAD (Pb)	0.003~0.025	0.003~0.110	---
BORON (B)	0.0002~0.014	0.0002~0.014	---
TIN (Sn)	0.001~0.12	0.001~0.05	0.001~0.19
ZINC (Zn)	0.001~0.027	---	---
ARSENIC (As)	0.001~0.081	0.001~0.12	---
ZIRCONIUM (Zr)	0.0015~0.20	---	---

ANALYTICAL RANGES FOR NON-FERROUS METAL ALLOYS ANNEXURE-C

ELEMENT	Cu- Cu Alloy	Al-Pure	Al-Alloy	Zn- Pure	Zn Alloy	Pb Pure	Sn- Sn Alloy
ALUMINUM (Al)	0.50~ 10.60	97.0~99.90	87.0~98.0	0.005~ 0.04	0.20~ 5.15	---	---
IRON (Fe)	0.30~ 1.5	0.04~ 0.40	0.05~ 1.60	0.005~ 0.02	0.02~ 0.16	0.001~0.08	0.001~0.02
TIN (Sn)	0.20~0.60	---	0.05~0.15	0.002~0.018	---	0.01~51.1	99.0~99.99 18.0~40.0
BISMUTH (Bi)	0.01~ 1.15	---	---	---	---	0.001~ 0.10	0.001~ 0.10 0.14~0.16
SILICON (Si)	0.05~ 5.85	0.03~ 0.50	0.20~ 11.80	---	0.005~ 0.08	---	---
PHOSPHOROUS (P)	0.01~ 1.00	---	---	---	---	---	---
SULPHUR (S)	0.001~ 0.10	---	---	---	---	---	---
MANGANESE (Mn)	0.05~ 3.40	0.001~ 0.10	0.01~ 1.20	---	0.001~ 0.11	---	---
NICKEL (Ni)	0.50~ 33.50	0.002~ 0.05	0.01~ 1.65	0.001~ 0.03	0.001~ 0.02	---	---
ZINC (Zn)	0.30~ 31.80	0.002~ 0.20	0.01~1.50	98.0~99.99	---	0.001~0.02	---
LEAD (Pb)	0.20~ 15.50	---	0.01~ 0.30	0.01~ 0.15	0.004~ 0.15	99.0~99.99	0.001~0.30 57.0~94.0
COPPER (Cu)	98.0~99.99	0.002~ 0.30	0.05~ 9.0	0.001~ 0.015	0.005~ 1.90	0.002~3.06	0.001~0.10 0.04~0.05
MAGNESIUM (Mg)	---	0.001~ 0.10	0.30~ 3.30	0.001~ 0.02	0.03~ 0.11	---	---
CHROMIUM (Cr)	---	0.001~ 0.05	0.001~ 0.30	---	0.001~ 0.18	---	---
TITANIUM (Ti)	---	0.001~ 0.10	0.001~ 0.20	---	---	---	---
CADMIUM (Cd)	---	---	---	0.001~0.02	---	0.001~0.06	---
TIN (Sn)	0.20~0.60	---	0.05~0.15	0.002~0.018	---	0.001~0.05	---
ARSENIC (As)	---	---	---	---	---	0.001~0.04	0.001~0.10 0.03~0.05
ANTIMONY (Sb)	---	---	---	---	---	0.01~0.12	0.001~0.15 0.50~2.30

ANALYTICAL RANGES FOR FERRO-ALLOYS**ANNEXURE-D**

ELEMENT	ANALYTICAL RANGES (%AGE)					
	Ferro-Vanadium	Ferro-Chrome	Ferro-Silicon	Ferro-Titanium	Ferro-Tungsten	Ferro-Manganese
Aluminum (Al)	0.41~2.80	0.001~0.05	0.001~3.50	7.20~10.50	0.001~0.14	---
Iron (Fe)	16.0~47.20	10.0~35.0	21.80~50.85	46.85~52.65	15.20~18.13	12.60~15.90
Silicon (Si)	0.48~1.79	0.20~7.0	20.0~80.0	1.80~3.80	0.20~1.75	0.30~2.0
Phosphorous (P)	0.020~0.043	0.01~0.05	0.01~0.10	0.001~0.03	---	0.10~0.35
Sulphur (S)	0.008~0.040	0.003~0.10	0.001~0.03	0.001~0.03	---	0.001~0.03
Manganese (Mn)	0.16~0.35	0.10~1.30	0.05~60.0	0.52~1.15	---	75.0~86.40
Nickel (Ni)	0.001~0.06	0.01~0.20	0.003~0.15	---	---	0.05~0.15
Arsenic (As)	---	---	---	---	0.001~0.10	---
Copper (Cu)	0.001~0.06	0.01~0.05	0.05~0.15	0.001~0.15	---	0.01~0.06
Magnesium (Mg)	---	---	0.001~0.025	---	---	---
Chromium (Cr)	0.001~0.60	41.0~75.0	0.01~0.25	---	---	0.001~0.05
Titanium (Ti)	---	0.20~6.50	0.01~0.15	37.15~38.20	---	---
Calcium (Ca)	---	---	0.01~0.35	---	---	---
Magnesium (Mg)	---	---	0.001~0.025	---	---	---
Tungsten (W)	---	---	---	---	50.00~81.00	---
Vanadium (V)	50.00~81.00	0.05~0.40	0.001~0.01	---	---	---

ANALYTICAL RANGES FOR MATERIALS**ANNEXURE-E**

CONSTITUENT ANALYSED	IRON ORE/ SINTER/ SLAGS	Mn-ORE
Fe (Total)	31.0~68.74	3.00~34.0
SiO₂	0.30~18.0	2.00~38.00
Al₂O₃	0.10~7.00	0.10~6.00
CaO	0.10~18.00	0.10~14.40
MgO	0.03~10.70	0.10~4.80
TiO₂	0.01~6.40	0.01~0.50
Mn	0.01~8.0	13.00~48.0
P	0.01~0.60	0.02~0.60
S	0.01~0.50	0.01~0.50

ANALYTICAL RANGES FOR REFRACTORY MATERIALS**ANNEXURE-F**

Constituent Analyzed	Limestone	Dolomite	Refractory Clays	Quartzite/ Silica Sand	Chrome Magnesite	Magnesite
Fe ₂ O ₃	0.05~4.90	0.09~14.14	0.13~14.55	0.012~5.40	1.25~20.07	0.01~20.0
SiO ₂	0.40~6.84	0.50~15.60	10.34~62.76	54.0~98.90	2.59~24.30	0.80~19.40
Al ₂ O ₃	0.10~6.27	0.17~5.10	18.30~60.20	0.03~4.20	11.62~29.96	0.90~14.70
CaO	40.45~55.40	22.48~39.71	0.06~10.84	1.50~10.03	0.05~3.57	0.01~6.80
MgO	0.20~8.04	9.15~20.90	0.05~7.67	0.02~4.21	15.54~63.00	53.50~96.56
MnO	0.01~0.03	0.01~0.20	---	---	0.01~0.10	0.01~0.15
TiO ₂	0.01~0.20	0.10~0.15	0.01~7.70	0.017~5.12	---	0.01~5.12
P	0.002~0.20	0.001~0.40	0.01~0.40	0.001~0.10	0.001~0.23	0.01~0.50
S	0.005~0.10	0.005~0.10	---	0.001~0.04	---	0.01~0.50
K ₂ O			0.094~12.10	---	Cr ₂ O ₃ = 13.40~48.14	Cr ₂ O ₃ = 0.20~17.20
Na ₂ O	---		---	---	---	0.01~1.40
ZrO ₂	---	---	0.001~0.006	---	0.01~0.20	---

SIZES FOR SIEVE ANALYSIS**ANNEXURE-G**

S.No.	SIZE (mm) ASTM	S.No.	SIZE (mm) ASTM
1	5.00	13	0.84
2	4.00	14	0.63
3	3.15	15	0.59
4	2.83	16	0.50
5	2.50	17	0.40
6	2.38	18	0.315
7	1.68	19	0.20
8	1.60	20	0.15 (100 MESH)
9	1.40	21	0.075 (200 MESH)
10	1.19	22	0.063 (230 MESH)
11	1.00	23	0.05
12	0.90		

Special Consolidated offer

Note: In case of raw material sample should be 50 gram in 100 mesh otherwise additional Rs.3500/-

Material	Test Parameter	Testing Charges
Iron Ore	Fe(T), FeO, Fe ₂ O ₃ , SiO ₂ , Al ₂ O ₃ , CaO, MgO, TiO ₂ , MnO, P, S, LOI & Alkalies	• Rs. 15600/ per sample
Mn-Ore	Mn(T), MnO, SiO ₂ , Al ₂ O ₃ , CaO, MgO, TiO ₂ , Fe(T), P, S, Alkalies & LOI.	• Rs. 14400/ per sample
Coal	Moisture, Ash, Volatile mater, Fixed carbon, Sulphur (T) & Free Swelling Index (FSI).	• Rs. 17500/ per sample
	Ash Composition	• Rs. 13500/ per sample.
Steel	C, Si, Mn, P, S	• Rs. 6000/ per sample
	Ultimate Tensile Strength, Elongation, Reduction in Area, Yield / Proof Stress at 0.2 %, 0.5%, 1.0%.	• Rs.2600/ sample for UTS including sample preparation. • Rs. 800/ test will be additionally charged on associate tests.
	Bend Test	• Rs. 2400/ per sample. • Including sample preparation.

will be charge for Lump form sample and Rs.2000/- for granule form sample.

Terms & Conditions.

- i). Samples are to be delivered at Pakistan Steel premises.
- ii). Payment is to be made in advance through pay order / demand draft in favour of Pakistan Steel.
- iii). 15% SST will be charged additional on per sample testing.
- iv). Additional charges for sample preparation will be charged as under:-
 - a) Rs.3500/- in case of sample in Lump form,
 - b) Rs.2000 in case of sample in granule form.
 - c) Rs.800 for chips formation in case of steel sample.
 - d) Rs.5000/- will be charged for Ash preparation in case of coal sample.
- v). Retention time for all types of samples is 15 days.
- vi). "TAT" turnaround time would be 05 to 07 working days. **(ordinary service charges) added**
- vii). "TAT" turnaround time would be 04 working days. **(Express service charges) added.**

Note: for Express service **50% additional** would be charged on ordinary fee. **added.**

- **Client 's responsibilities** for NDT testing out side Pakistan steel (within Karachi)
 - a) Scaffolding, lighting, power, water or any other requirement.
 - b) Arranging entry / exit gate pass for Pakistan steel personnel & material.
 - c) Safety & security of NDT equipments and manpower deputed at site.
- For further details please contact

DY. Chief. Engr (Process Labs) Pakistan Steel Bin Qasim Karachi-75000

Fax: 021-34750156 Phone: 34750271-99264222

Ext: 4695 DCE- Incharge. Process labs.

Industrial liaison Officer: Ext 4951

**WE PROVIDE COMPLETE SOLUTION
TO YOUR TESTING NEEDS**

WITH

QUALITY, RELIABILITY & ACCURACY



For further details please contact
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